Week 6 - Package 1 - Kindergarten Mathematics - Subitising - match my collection

Things you need

Have these things available so your child can complete this task.

Ideal

- Subitising match my collection video
- Collection of 10 things like dried pasta or blocks

Back up

Show your child faces of a dice you have at home.

Why is this activity important?

When children subitise it means they can work out how many in a collection without having to count everything they see. They can describe how many by looking and thinking which helps your child build their mathematical imaginations. Spatial structures are critical mathematical representations that children need to be able to make meaning from. It later enables children to work flexibly with numbers and operations.

Before you start

Your child can interact with this task on their own if needed. If you are with them, observe what they know and gently guide them to respond to the video only as needed.

What your child needs to know and do

By exploring how different people use subitising and other knowledge they have used to work out how many in a collection helps us all learn different things about numbers.



Watch the <u>Subitising match my collection video</u> and have your child interact with the video as they watch it.

Options for your child

Activity too hard?

Pause the video for a while if needed, so your child can create their representations.

Activity too easy?

Ask your child Are there other ways to prove their thinking?

Ask your child to draw different ways of representing the same amount.

Follow-up questions to ask your child

- · Can you explain your thinking?
- What did you notice?
- How is the thinking in the video similar or different to yours?

Extension/additional activity

Engage with subitising dice patterns.

Week 6 - Package 2 - Kindergarten Mathematics - Go fish -teen and -ty

Things you need

Have these things available so your child can complete this task.

Ideal

- Teen/ty number cards
- Another player/players
- Scissors
- Clear space to place the cards

Back up

If your child is unable to play this game with someone, your child could play concentration or memory instead.

Why is this activity important?

Having strong knowledge of number names and ways of representing numbers is a critical part of developing number sense.

Before you start

- Some background information,' the suffix 'ty' means groups of ten. For example, if we have four groups of ten, we rename it as forty.
- Make sure you have the required resources ready.
- This activity can be played individually, with a partner or with a group of people.

What your child needs to know and do

You can easily adapt this task to suit the skills of your child.



How to play:

- Shuffle the cards.
- If you have 2 players, deal 7 cards to each player.
- If you have 3 or more players, deal 5 cards to each player.
- Put all of the left-over cards in a central pile.
- Choose a player to go first. Then, take turns to look for matching pairs. Once you have a pair, you can put the pair down and keep it. Take it in turn to ask a player for a specific card. For example, "Amy, do you have 'thirteen' in words?"
- If the player has the card you asked for, she or he must give you that card. If she or he doesn't have the card, they say "go fish" and the person picks up a card from the central pile. If you happen to draw a card you need, a pair can be made. Otherwise, it is the next player's turn.
- Go Fish continues until either someone has no cards left in their hand or the draw pile runs out.
- The winner is the player who then has the most matches (sets of pairs).

Options for your child

Activity too hard?

Have a look at the cards with your child and discuss the representations.

Activity too easy?

Ask your child to think of other ways to show a representation.

Follow-up questions to ask your child

- Is there another way we could play this game? Let's make up some new rules together.
- How are you deciding that these cards go together?
- Why are those two representations the same?

Extension/additional activity

Encourage your child to create their own cards to use in this game.

Week 6 - Package 3 - Kindergarten Mathematics - Dotty six

Things you need

Have these things available so your child can complete this task.

Ideal

- Dotty six video
- Paper (to make your game board and your number cards)
- 3 sets of number cards showing numbers 1, 2, 3, 4, 5 and 6
- Another player
- Coloured pencils or markers

Back up

Use toys or figurines to have two teams play against each other.

Why is this activity important?

This game focuses on some key mathematical skills including counting, representations and combining quantities. It supports your child to develop their mathematical reasoning as they learn strategies to increase their chances of winning.

Before you start

- Make sure you have the required resources ready to use.
- This activity can be played with a partner or individually by using figurines to represent two teams.

What your child needs to know and do

You can easily adapt this task to suit the skills of your child.



Watch the **Dotty six video**.

How to play:

These are the rules we used to play this game, however, these are open to suggestions!

- Take turns to roll the dice and put the corresponding number of dots into a box.
- You can put your dots anywhere, but you can't have more than 6 dots in any box.
- You have to put all of your dots in 1 box.
- You win if you finish the row, column or diagonal of complete boxes (6 dots in each).
- If you can't go, you miss a turn.

Options for your child

Activity too hard?

Create the cards with the dot pattern displayed on the cards.

Activity too easy?

Change the total. So instead of Dotty 6, make it Dotty 12 or Dotty 21, for example

Follow-up questions to ask your child

- Where is a good place on your game board to place that amount?
- How many do we need to make 6 here?

Extension/additional activity

Change the number cards you use. So instead of numbers 1 - 6, you could make cards from 1 - 10, or, only use odd numbers, etc.

Change the grid from 3 x 3 to 4 x 4.

Week 6 - Package 4 - Kindergarten Mathematics - Maths explosion 7 feet follow up

Things you need

Have these things available so your child can complete this task.

Ideal

- Cardboard
- Marker
- MathXplosion 7 feet follow up video
- Activity sheet 1
- pencil

Back up

Read the instructions about Maths explosion 7 feet follow up

Why is this activity important?

This task offers your child the opportunity to:

- conduct mathematical investigations in their home
- measure lengths using uniform informal units (the cut out of their foot) by placing them end to end with no overlaps
- explore that when an item is longer, more units will be required to measure it.

Before you start

Make sure your child has the required resources ready.

Check that the video is working and the audio settings are correct for your child.



What your child needs to know and do

This task encourages your child to conduct mathematical investigations at home where they will need to explore to find solutions. They need to place the foot cut out end to get an accurate measure.

What to do next

View MathXplosion 7 feet follow up video.

Help your child trace around their foot on cardboard or paper and have them cut it out. This will be the unit that they will use to measure around the home.

Help your child to measure their own height using their foot measure. Are they 7 feet (their own foot) tall?

Ask your child:

- Can you find some things that are more than 7 of your feet tall? Write and draw your findings in Activity sheet 1.
- Can you find some things less than 7 of your feet tall? Write and draw your findings in Activity sheet 1.

Options for your child

Activity too hard?

Make multiple feet so that they don't have to keep the place of the unit and then move it up.

Activity too easy?

Measure more things with their foot or and cut out a measure of your foot so that they can investigate what happens when the unit used to measure gets bigger

Follow-up questions to ask your child

- Why is it important to iterate (place them end to end with no gaps) the unit?
- How many of your feet do you think your bed will be? Why?

Extension/additional activity

Measure the same item using different units from the different members of your family.

Activity sheet 1:

Trace around your foot and then cut it out:



Use your cut out to measure your height. Are you 7 feet tall?

Can you find some things that are more than 7 of your feet tall? Write and draw your findings.

Can you find some things that are less than 7 of your feet tall? Write and draw your findings.

Week 6 - Package 5 - Kindergarten Mathematics - Numberblocks - Stampolines follow up

Things you need

Have these things available so your child can complete this task.

Ideal

- Numberblocks Stampolines follow up video
- Numberblocks Stampolines episode (optional)
- Activity sheet 1
- Pencil

Back up

Read the instructions about Numberblocks - Stampolines follow up.

Why is this activity important?

This task offers your child the opportunity to explore the smaller numbers than make up larger numbers. It builds flexibility and number sense as well as spatial reasoning.

Before you start

Make sure your child has the required resources ready.

Check that the video is working and the audio settings are correct for your child.

What your child needs to know and do

This task encourages your child to see that collections can look different but still have the same amount. It also highlights the smaller numbers inside larger numbers.



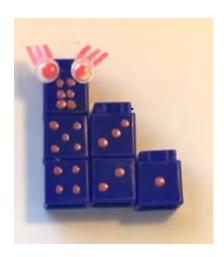
View Numberblocks - Stampolines follow up video.

In Numberblocks - Stampolines, the numberblocks were making stamps of themselves by dipping themselves into ink and then splatting on the wall.

Six can look like this:



She can also look like this:



How else could Six look?

Options for your child

Activity too hard?

Use blocks or pasta shells to physically move the pieces to see the different shapes that you can create with 6 blocks.

Activity too easy?

Encourage them to think creatively and look for more than 5 different ways of making Six.

Follow-up questions to ask your child

- What's similar and different about these two shapes of Six?
- How many different shapes for Six do you think there are?

Extension/additional activity

Explore Five and Seven. What do you notice happens as you increase the number of blocks?

Activity sheet 1:

What are all the different shapes Six could make playing Stampolines? See if you can come up with at least 5 different (and new) ways and draw them below.